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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/781,320

02/18/2004

Mark W. Jolley

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9435

22242

7590

08/16/2006

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EXAMINER

BASINGER, SHERMAN D

ART UNIT

PAPER NUMBER

3617

DATE MAILED: 08/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/781,320	Applicant(s) JOLLEY, MARK W.	
	Examiner Sherman D. Basinger	Art Unit 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2006.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-12, 14-16, 23 and 24 is/are allowed.
6) ☒ Claim(s) 17-22 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 20 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 17, 18 and 20 are objected to because of the following informalities:
Claims 17, 18 and 20 are hybrid claims having a preamble setting forth a method, but having a body of an apparatus claim (claims 17, 18 and 19 do not set forth any method steps). Appropriate correction is required.

Allowable Subject Matter

2. Claims 1-12, 14-16, 23 and 24 are allowed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Breezer et al newly cited.

For claim 19, Breezer et al discloses a generally planar board shown in figure 9 comprising:

a generally planar polymer shell having first 30 and second 34 sheets of material, the first and second sheets of material each having a perimeter and being spaced apart between the perimeters as is shown in figure 6, the perimeters of the first and second sheets of

material being bonded together (column 4, lines 18-20) to form periphery edges of the board free from

attachment to anything other than the shell itself; and

a core 48 of a material different (column 6, lines 18-20) than the material of the first and second sheets,

the core substantially filling the interior of the shell (figure 8) between the periphery edges and

spacing the first and second sheets apart between the perimeters without a stringer

and having residual compressive stresses (column 4, lines 18-20) providing structural rigidity to the shell.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by Breezer et al.

For Claim 22 Breezer et al discloses a method of manufacturing a board, the method comprising

providing upper 34 and lower 30 sheets of a generally rigid polymer material;

inserting the upper and lower sheets of material into an interior of a mold cavity as shown in figures 6-8;

forming the upper and lower sheets of material to the interior of the mold

cavity to form a shell having a single hollow interior as shown in figure 6-8;

filling the entire shell with an expandable liquid material 48 to form a generally rigid inner core; and

preventing the shell from substantially deforming during filling with the expandable liquid material using a mold cavity as shown in figures 6-8 having a shape substantially conforming to the shell. (note that claim 22 never states that the mold preventing the shell from deforming is different than the mold into which the upper and lower sheets are inserted.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 17, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirsch in view of Breezer et al.

For claim 17 Hirsch 44 discloses a method of manufacturing an apparatus, the method comprising

means 44 and 46 for forming at least two sheets of material 54 to the interior of a first mold

cavity (figure 5) to form a shell having a single hollow interior (figure 6a); however, Hirsch does not disclose

means for filling the entire shell with an expandable liquid material in a second mold cavity having a shape substantially conforming to the shell, the second mold cavity preventing the shell from substantially deforming during filling

with the expandable material.

Hirsch does disclose forming the shell in another mold to be added later to a molded foam body which is molded around the stringer.

Breezer et al teaches filling a shell 50 with an expandable liquid material in a mold cavity, the mold cavity providing means for preventing the shell from substantially deforming during filling with the expandable material.

In view of the above teachings it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide means for filling the entire shell with an expandable liquid material in a second mold cavity having a shape substantially conforming to the shell, the second mold cavity being means for preventing the shell from substantially deforming during filling with the expandable material. Motivation to do so is to fill the shell with a liquid expandable material as opposed to filling it with pellets which have to be melted by steam in order to fill the shell cavity with the expandable foam.

With regard to claim 18 the apparatus of Hirsch comprises a floatable board. Hirsch also discloses that the material of the core comprises at least one of polyurethane and polystyrene (Styrofoam) and that the material of the polymer shell comprises at least one of polycarbonate, ABS and TPO.

8. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Breezer et al in view of Teraoka.

Breezer et al does not disclose that graphics are disposed on the interior of the shell between the shell and the core.

Note column 4, lines 65-end of Teraoka. In view of this disclosure by Teraoka, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to dispose graphics on the interior of the shell between the shell and the core of Breezer et al. Motivation to do so is to provide a article as shown in figure 9 of Breezer et al with graphics which can be seen but can't be worn off.

Response to Arguments

9. Applicant's arguments filed August 3, 2006 with respect to claims 17-22 have been fully considered but they are not persuasive. In view of the amendments to claims 17, 19 and 22, Breezer et al is newly cited. Breezer et al anticipates claims 19 and 22 as amended. With regard to claim 17, Breezer et al also provides a teaching of injecting a liquid expandable material in the shell of Hirsch as opposed to using pellets which have to be heated by steam.

Conclusion


10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 571-272-6679. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



/Sherman D. Basinger/
Sherman Basinger, Primary
Examiner
Art Unit 3617

8/14/06